EAST Search History

Ref. #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	763	560/100.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR .	ON	2007/08/07 17:51
L2		560/106.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR .	ON	2007/08/07 17:51
L3	238	560/223.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON ·	2007/08/07 17:51
L4	613	562/553.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/08/07 17:52
L5	790	564/155.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/08/07 17:52
L6	3004	L1 OR L2 OR L3 OR L4 OR L5	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/08/07 17:52
L7	7	L6 AND CASPASE\$	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON À	2007/08/07 17:53
L8	45	L6 AND APOPTOSIS	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/08/07 17:57
L9	790	562/450.CCLS.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/08/07 17:57

8/7/2007 6:00:04 PM Page 1

EAST Search History

L10	3727	L6 OR L9	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/08/07 17:57
L11	89	L10 AND APOPTOSIS	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/08/07 17:57
L12	20	L10 AND CASPASE\$	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/08/07 17:57

8/7/2007 6:00:04 PM

10/542,684

08/07/2007

L1STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

SAMPLE SEARCH INITIATED 15:59:08 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED -0 TO ITERATE

100.0% PROCESSED

0 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **COMPLETE**

BATCH

COMPLETE

PROJECTED ITERATIONS: .

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PROJECTED ANSWERS:

0 TO

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FULL SEARCH INITIATED 15:59:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED 50 TO ITE

50 TO ITERATE

100.0% PROCESSED

50 ITERATIONS

SEARCH TIME: 00.00.01

19 ANSWERS

L3

19 SEA SSS FUL L1

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL SESSION

FULL ESTIMATED COST

ENTRY 172.10

172.31

FILE 'CAPLUS' ENTERED AT 15:59:19 ON 07 AUG 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

Searched by Jason M. Nolan, Ph.D.

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=> s 13 L4 3 L3

=> d ibib abs hitstr 1-3

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:675705 CAPLUS DOCUMENT NUMBER: 141:207524 141:207524
Preparation of peptidyl irreversible caspase-3
inhibitors as active site probes
Colucci, John; Giroux, Andre: Han, Yongxin; Methot,
Nathalie; Nicholson, Donaid W.; Roy, Sophie;
Vaillancourt, John Paul; Tawa, Paul
Merck Frost Canada & Co., Can.
PCT Int. Appl., 70 pp.
CODEN: PIXXD2
Patent DOCUMENT NUMBER: TITLE: INVENTOR (S) : PATENT ASSIGNEE (S): DOCUMENT TYPE: Instant 2 English 1 FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2004069773 A1 20040819 WO 2004-CA152 20040205

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CM, CG, CR, CW, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GB, GR, GM, HA, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, ND, MG, MK, MN, MW, MX, MZ, MZ, NI, BB, GC, CR, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, GC, GW, ML, NP, NS, SS, LS, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, CQ, GW, ML, MR, NE, SN, TD, TG

CA 2514441 A1 2004019 CA 2004-2514441 20040205

ER 1594819 A1 20051116 EP 2004-708294 20040205

ER, AT, BE, CH, DE, DE, KE, ES, FG, FR, GG, GR, TM, LT, LU, LV, SK, MC, PT, LT, LU, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

JP 2006519777 T 20060831 JP 2006-501408 20040205

US 2006069038 A1 20060330 US 2005-5142684 20050719

PRIORITY APPLM. INFO: 9 W0 2004-CA152 BA, BB, BG, BR, BW, BY, DM, DZ, EC, EE, EG, ES, IN, 1S, JP, KE, KG, KP, MD, MG, MK, MN, MW, MX, SD, SL, SZ, TZ, UG, ZM, ES, FI, FR, GB, GR, HU, TR, BF, BJ, CF, CG, CI, TG WO 2004-CA152 20040205 OTHER SOURCE(S): MARPAT 141:2075 2/7/03

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
741292-98-8 CAPLUS
Pentanoic acid, 5-fluoro-3-[{[23]-2-{[(5-(iodo-1251)-2-methoxyphenyl]acetyl]amino}-3-methyl-1-oxobutyl]amino}-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

741292-99-9 CAPLUS
Pentanoic acid, 5-(acetyloxy)-3-[[(2S)-2-[[(5-(iodo-125I)-2-methoxyphenyl]acetyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

741293-00-5 CAPLUS
Pentanoic ecid, 5-(benzoyloxy)-3-[((28)-2-[([5-(iodo-1251)-2-methoxyphenyl]acetyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- (9CI) (CA

Absolute stereochemistry.

741293-01-6 CAPLUS Benzoic acid, 2,6-dimethyl-, 4-carboxy-3-{{(25)-2-{{(5-(iodo-1251)-2-methoxyphenyl|acetyl|amino}-3-methyl-1-oxobutyl|amino}-2-oxobutyl|amino}} ester (9CI) (CA INDEX NAME)

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The invention encompasses compds. I [X is halo or O-W-Z, where W is a bond, CH2, CO or COCH2 and Z is H, alkyl, cycloalkyl, Ph, etc.; R2 is H, halo, hydroxy, nitro, cyano, alkyl, etc.; R3 is Ph or (un)substituted alkyl or alkoxy; R5 is H, Ph, naphthyl, (un)substituted alkyl or alkoxy; R5 is H, Ph, naphthyl, (un)substituted alkyl and R6 is H or R5 and

together form a ring) which are useful for determining whether a caspase

been activated in cells or in tissues of animal models of various pathologies. Furthermore, through competition based assays, these

active site probes can be used to calculate the percentage of occupancy

active site probes can be used to calculate the percentage of occupancy of active caspases by other, unlabeled inhibitors. Thus, peptide II was prepared via coupling reactions of Me (5-iodo-2-methoxyphenyl)acetate, L-valine tert-Bu ester hydrochloride, and tert-Bu

3-amino-2, 3,5-trideoxy-5-fluoropentonete, followed by tributylstannylation, iodination, and deprotection with TFA. II was assayed for inhibition of a subset of caspases and for detection of active caspases in protein exts.

17 741292-98-8P 741293-99-9P 741293-00-5P 741293-01-6P 741293-01-6P 741293-01-6P 741293-05-0P 741293-06-1P 741293-07-2P 741293-01-9P 741293-09-4P 741293-10-7P 741293-11-8P 741293-12-9P 741293-13-0P

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); USES (Uses) (preparation); USES (Uses) (preparation of peptidyl irreversible caspase-3 inhibitors as active site

probes)

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry.

741293-02-7 CAPLUS
1-Maphthalenecarboxylic acid, 4-carboxy-3-[[(2S)-2-[[[5-(iodo-1251)-2-methoxphenyl]acetyl]amino]-3-methyl-1-oxobutyl]amino]-2-oxobutyl ester
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

741293-03-8 CAPLUS

NN 741233-03-0 CATAGO

Pentanoic acid,
3-[[(2S)-2-[([(2-ethoxy-5-(iodo-1251)phenyl]acetyl]amino]-3methyl-1-oxobutyl]amino]-5-fluoro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

741293-04-9 CAPLUS
Pentanoic acid, 5-fluoro-3-{{(2S}-2-{[[5-(iodo-1251)-2-methoxyphenyl]acetyl]amino}-1-oxobutyl]amino]-4-oxo- (9CI)

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.

741293-05-0 CAPLUS
Pentanoic acid, 5-fluoro-3-{[(25)-2-[([5-(lodo-125I)-2-methoxyphenyl]acetyl]amino]-1-oxopropyl]amino]-4-oxo- (9CI) (CA INDEX NAME)

741293-06-1 CAPLUS
Pentanoic acid, 5-fluoro-3-{[(28)-[[[5-{iodo-1251}-2-methoxyphenyl]acetyl]amino]phenylacetyl]amino]-4-oxo- (9CI)
NAME)

Absolute stereochemistry.

741293-07-2 CAPLUS
Pentanoic acid, 5-fluoro-3-{[(28,38)-2-([(5-(iodo-125I)-2-

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STM (Continued) methoxyphenyl]acetyl[amino]-3-methyl-1-oxopentyl]amino]-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

741293-08-3 CAPLUS
Pentanoic acid, 3-{((2S)-cyclopentyl[[[5-{iodo-1251}-2-methoxyphenyl]acetyl]amino]acetyl]amino]-5-fluoro-4-oxo- (9CI) {CA INDEX NAME}

Absolute stereochemistry.

741293-09-4 CAPLUS
Pentanoic acid, 5-fluoro-3-[[{2S}-2-[[[5-{iodo-125I}-2-{1-methylethoxy)phenyl}acetyl]amino}-3-methyl-1-oxobutyl]amino]-4-oxo- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

741293-10-7 CAPLUS
Pentanoic acid, 5-fluoro-3-[[(2S)-2-[[(5-(iodo-125I)-2-phenoxyphenyl]acatyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

741293-11-8 CAPLUS
Pentanoic acid, 5-chloro-3-[[(2S)-2-[[[5-[iodo-125]]-2-methoxyphenyl]acetyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- [9CI] (CA INDEX NAME)

Absolute storeochemistry.

741293-12-9 CAPLUS
Pentanoic acid, 5-bromo-3-[{(28)-2-{[[5-{iodo-125I}-2-mathoxyphenyl]acetyl}amino}-3-methyl-1-oxobutyl]amino}-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

741293-13-0 CAPLUS
Pentanoic acid, 3-{[(2S)-cyclohexyl{{(5-(iodo-125I)-2-mathoxyphenyl)acetyl}amino]acetyl]amino]-5-fluoro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry

741293-20-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (preparation of peptidyl irreversible caspase-3 inhibitors as active

probes)
741293-20-9 CAPLUS
Pentanoic acid, 5-fluoro-3-[[(2S)-2-[[(5-iodo-2-methoxyphenyl)acetyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:524634 CAPLUS DOCUMENT NUMBER: 141:238703
 DOCUMENT NUMBER:
TITLE:
                                                                                                                           141:23703
A Caspase Active Site Probe Reveals High Fractional
Inhibition Needed to Block DNA Fragmentation
Mathot, Nathalie: Vallancourt, John P.: Huang,
JingQi: Colucci, John; Han, Yongxin; Menard,
AUTHOR (S):
Stephane;
    Zamboni, Robert: Toulmond, Sylvie: Nicholson, Donald
W.; Roy, Sophie

CORPORATE SOURCE: Merck Frosst Centre for Therapeutic Research, Merck
Research Laboratories, Montreal, QC, H9H 311, Can.
Journal of Biological Chemistry (2004), 279(27),
27905-27914

CODEN: JBCHRA3: ISSN: 0021-9258

AMERICAN SOCIETY FOR Biology
JOURNET TYPE: Journal
JOURNET TYPE: Journal
JOURNET TYPE: Journal
ANGUAGE: English
B Apoptotic markers consist of either caspase substrate cleavage products
 CORPORATE SOURCE:
 SOURCE:
PUBLISHER .
 DOCUMENT TYPE:
                       phenotypic changes that manifest themselves as a consequence of caspase-mediated substrate cleavage. We have shown recently that pharmacol inhibitors of caspase activity prevent the appearance of two such apoptotic manifestations, all-spectrin cleavage and DNA fragmentation, but that blockade of the latter required a significantly higher concentration of inhibitor. We investigated this phenomenon such the
                        igh the
use of a novel radiolabeled caspase inhibitor, [1251]M808, which acts as
                    use of a novel radiolabeled caspase inhibitor, [125]]M808, which acts as caspase active site probe. [125]]M808 bound to active caspases irreversibly and with high sensitivity in apoptotic cell exts., in tissue exts. from several commonly used animal models of cellular injury, and in living cells. Moreover, [125]]M808 detected active caspases in septic mice when injected i.v. Using this caspase probe, an active site occupancy assay was developed and used to measure the fractional inhibition required to block apoptosis-induced DNA fragmentation. In thymocytes, occupancy of up to 40% of caspase active sites had no effect on DNA fragmentation, whereas inhibition of half of the DNA cleaving activity required between 65 and 75% of active site occupancy. These results suggest that a high and persistent fractional inhibition will be required for successful caspase inhibition-based therapies. 741292-98-8P, [125]]M 808
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); DNA (Preparation); USES (Uses)
REFP (Preparation); USES (Uses)

[active site probe [125]]M808 reveals high fractional inhibition of human caspase-3 is needed to block apoptosis-induced DNA membrances consults.
                     mentation)
741292-98-8 CAPLUS
Pentanoic acid, 5-fluoro-3-[[(2S)-2-[[[5-(iodo-125])-2-
methoxyphenyl]acetyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- (9CI) (CA
INDEX NAME)
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Absolute stereochemistry.

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ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
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REFERENCE COUNT:

44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:185062 CAPLUS DOCUMENT NUMBER: 136:232548 TITLE: Preparation Preparation of y-keto acid dipeptides as Preparation of y-keto acid dipeptides as inhibitors of caspase-3 Han, Yongxin: Giroux, Andre: Grimm, Erich L.; Aspiotis, Renee: Black, Cameron Merck Frosst Canada & Co., Can. PCT Int. Appl., 99 pp.
CODEN: PIXXD2 INVENTOR (S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: Patent English 1 FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. WC 2002020465 A2 20020314 WC 2001-CA1272 20010906
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, NN, MW, MK, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, LA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, TM, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NI, PT, SE, TR, BF, BJ, CF, CC, CI, CM, GA, GN, CQ, GW, ML, MR, NE, SN, TD, TG
CA 2421172 A1 20020314 CA 2001-2421172 20010906
AU 2001093533 A5 20020322 AU 2001-993867 20010906
EP 1317414 A2 20030611 EP 2001-973867 20010906
RN AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, JU, NIL, SE, MC, PT
RN AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, JU, NIL, SE, MC, PT
RN AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, JU, NIL, SE, MC, PT
RN AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, JU, NIL, SE, MC, PT R; AT, BE, CH, DE, DK, ES, FR,
E, SI, LT, LV, FI, RO, MK,
JP 2004521080 T 20040715 GB, GR, IT, LI, LU, NL; SE, MC, PT, CY, AL, TR 2002-525088 20010906 US 2002165230 US 6525025 20021107 US 2001-948244 20030225 RIORITY APPLN. INTO. : US 2000-231019P P 20000908 WO 2001-CA1272 W 20010906

OTHER SOURCE(S): MARPAT 136:232548 y-Keto acid dipeptides RCRIZCONHCRZR3CONHCH(CH2CO2H)COCH2-O-W-Z [W = a bond, CH2, CO or COCH2; Z = H, (un)substituted alkyl, cycloalkyl or a benzofused analog, Ph, naphthyl or a 5- to 10-membered mono- or bicyclic, aromatic or non-aromatic ring, or a benzofused analog, containing 1-3 createms.

Selected from O, S and N; R = (un)substituted alkoxyphenyl; R1 = H, ha OH, alkyl or alkoxy optionally substituted by oxo or 1-3 halo groups;

H, Ph, naphthyl, (un)substituted (cyclo)alkyl; R3 = H or R2R3 represent a 4-7 membered ring optionally containing one heteroatom selected from O, d

N) were prepared as inhibitors of caspase-3. Thus, (35)-5-[(2-chloro-6-fluorobenzyl)oxyl-3-[([25)-2-[(2-(2,5-dimethoxyphenyl)acetyl)amino]-3-methylbutanoyl]amino]-4-oxopentanoic acid was prepared by the solid phase method by loading (3)-FmecNRCH(CH2COZBLT-L)COCH2BT (Fmoc = fluorenylmethoxycarbonyl) (preparation described) onto a solid support

the technol. described by Webb et al. (1992). 403499-45-69 403499-46-79 RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

- ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of y-keto acid dipeptides as inhibitors of caspase-3) 403499-45-6 CAPLUS 1-Naphthalencearboxylic acid, 4-carboxy-3-[{(23)-2-([hydroxy(5-iodo-2-methoxyphanyl)acetyl]amino]-3-methyl-1-oxobutyl]amino]-2-oxobutyl ester (9CI) (CA INDEX NAME)

RN 403499-46-7 CAPLUS
CN Pentanoic acid,
3-[[(25)-2-[[hydroxy(5-iodo-2-methoxyphenyl)acetyl]amino]3-methyl-1-oxobutyl]amino]-5-(1-naphthalenyloxy)-4-oxo- {9CI} (CA INDEX NAME)

Absolute stereochemistry.